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SECTION II. REMARKS

By the present amendment, Applicants have amended claims 35 and 61-64, and have canceled claim 15. No new matter has been added. Claims 1-7, 19-21, 24-34, 36-42, 46-48, 50, and 51 were cancelled previously. As a result, claims 8-14, 16-18, 22, 23, 35, 43-45, 49, and 52-65 are pending in the present application with claims 8, 16, 17, 18, 22, 35, 43, 44, 45, 49, and 62 being independent claims. Remarks addressing the restriction/election and claim rejections under 35 U.S.C. § 103 as contained in the Office Action mailed June 16, 2005 are provided below.

Telephonic Interview Conducted on June 28, 2005

Applicants wish to thank the Examiner for consenting to a telephonic interview on June 28, 2005 with the undersigned to discuss the merits of the present application. It is believed that the present Amendment places the application in condition for allowance. If the application is not allowed, entry of the amendment is requested as Applicants believe the present Amendment at least places the application in better form for appeal.

Allowed Subject Matter

The Examiner has already indicated that claims 16-18, 22, 43-45, and 49 are directed to allowable subject matter. E.g., Office Action mailed April 20, 2005, page 7.

Election/Restriction

Claim 15 was withdrawn from consideration as being directed to a non-elected invention. By the present amendment, claim 15 has been canceled. As discussed in the telephonic interview conducted on June 28, 2005, Applicants understand that the constructive election and withdrawal of claims 35 and 61-65 as indicated at page 2 of the Office Action mailed April 20, 2005 was erroneous, and that such constructive election and withdrawal was intended to be directed solely to claim 15.

§103 Rejection of Claims 8-14, 35, 52-58, 60, and 62-65

Claims 8-14, 35, 52-58, 60, and 62-65 were rejected under 35 U.S.C. 103(a) as being allegedly invalid for obviousness over Soga (U.S. Patent Application Publication No. 2003/0230524 A1) in view of Bruno-Raimondi (U.S. Patent No. 6,437,345), Wolk ("Ultraviolet Absorbance Spectroscopy in a 3-Dimensional Microfluidic Chip"), Gilby (U.S. Patent No. 5,900,934) and Druy (U.S. Patent No. 6,289,149).

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As discussed in the Interview conducted on June 28, 2005, claim 8 requires that the first end of each fiber optic conduit "bounds a portion of the cavity of a different flow-through detection region of the plurality of detection regions." When the device is in operation and fluid is supplied to the cavity, the first end of the fiber comes in direct contact with the fluid without any interposing solid material. This feature distinguishes claim 8 from the cited art. Applicants disagree with any suggestion that Bruno-Raimondi suggests the use of fiber optic conduits ends each bounding a portion the cavity of a different flow-through detection region, notwithstanding the statement at column 4, lines 37-38 of Bruno-Raimondi that an optical sensing unit "preferably" comprises an array of microlenses. Applicants respectfully submit that such a statement stands for the proposition that using an array of discrete microlenses each dedicated to a different parallel beam is preferred over the use of a single lens to produce a bundle of parallel component beams. See Bruno-Raimondi, Figs. 1-2 (showing single lens 8) and col. 6, lines 4-11 ("[a]n achromatic lens 8 ... is used to produce a bundle of 16 parallel component beams ...").

Claims 9-14, 52-58, and 60 all depend, whether directly or indirectly, from claim 8 and therefore include all the limitations of claim 8. Claims 35 and 62 have been amended to include the same limitation - namely, that each fiber optic conduit have a first end bounding a portion of a cavity of its associated detection region.

Three requirements must be met for a *prima facie* case of obviousness. First the prior art reference(s) must teach all of the limitations of the claims. M.P.E.P. § 2143.03. Second, there must be a motivation to modify the reference or combine the teachings to produce the claimed invention. M.P.E.P. § 2143.01. Third, a reasonable expectation of success is required. M.P.E.P. § 2143.02. In addition, the teaching or suggestion to combine and the expectation of success must both be found in the prior art and not based on Applicant's disclosure. M.P.E.P. § 2143.

Because the cited references fail to teach or suggest the use of fiber optic conduit ends each bounding a portion a cavity of a different flow-through detection region, they fail to teach all the limitations of claims 8-14, 35, 52-58, 60, and 62-65 and cannot support a *prima facie* case of obviousness pursuant to M.P.E.P. § 2143.03. Accordingly, withdrawal of the § 103 rejections of these claims is respectfully requested.

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§103 Rejection of Claims 23 and 59

Claims 23 and 59 were rejected under 35 U.S.C. 103(a) as being allegedly invalid for obviousness over Soga (U.S. Patent Application Publication No. 2003/0230524 A1) in view of Bruno-Raimondi (U.S. Patent No. 6,437,345), Wolk ("Ultraviolet Absorbance Spectroscopy in a 3-Dimensional Microfluidic Chip"), Gilby (U.S. Patent No. 5,900,934) and Druy (U.S. Patent No. 6,289,149), further in view of Miroslav (U.S. Patent No. 6,296,771).

Claims 23 and 59 both depend from independent claims 8. As discussed previously, claim 8 requires that the first end of each fiber optic conduit "bounds a portion of the cavity of a different flow-through detection region of the plurality of detection regions." This feature is not taught or suggested by any of the cited references. As a result, the cited art fails to all the limitations of claims 23 and 59, and therefore cannot support a prima facie case of obviousness under M.P.E.P. § 2143.03. Accordingly, withdrawal of the § 103 rejections of these claims is respectfully requested.

Amendment to Claim 62

As indicated previously, claim 62 has been likewise to include the same distinguishing "bounding" language as claims 8 and 35. In the process of revising claim 62, however, it was found that adding only the "bounding" limitation would render the claim nearly identical in scope to claim 8. Accordingly, proposed claim 62 has been amended to encompass "liquid analytical separation systems" of which liquid chromatography systems are a subset. Support for the amended language is found in the disclosure at, for example: paragraph [0004], page 1, lines 15-19; paragraph [0068], page 12, lines 10-13; paragraph [0084], page 16, lines 28-32; and paragraph [00116], page 27, lines 14-22. No new matter has been added.

(No) Fee Payable for Amended Claims

By the present amendment, one claim has been canceled and no claims have been added. Accordingly, it is believed that no excess claims fees are due and payable. If Applicants are mistaken in this regard, however, then the Office is hereby authorized to charge deposit account no. 502454 for any excess claim fees required as a result of the present amendment.

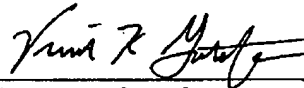
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Conclusion

Claims 8-14, 16-18, 22, 23, 35, 43-45, 49, and 52-65 as amended or reproduced herein and now pending in the application are fully patentably distinguished over the cited references, and in form and condition for allowance. Issuance of a Notice of Allowance for the application is therefore requested.

If any issues remain outstanding, incident to the formal allowance of the application, the Examiner is requested to contact the undersigned attorney at (919) 419-9350 to discuss the same, in order that this application may be allowed and passed to issue at an early date.

Respectfully submitted,



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